

### **REMARKS/ARGUMENTS**

Reconsideration of this Application and entry of this Amendment is respectfully requested.

The present amendment to independent claims 1, 6, 10, and 15 represent an agreement reached with the Examiner handling the application during a telephone interview between the Examiner and Applicant's representative David Benson on January 10, 2006, and is believed to place the claims in condition for allowance in view of the cited prior art. Applicant thanks the Examiner for conducting the interview.

#### **35 U.S.C. §102 Rejections**

Claims 1-3, 6-11, 14-17, 19 and 20 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Miller et al. (US Patent 6,293,959). These rejections are respectfully traversed.

Claims 1, 6, 10, and 15 are independent claims, and each recites that a catheter-mountable balloon includes at least one circumferential groove that is present when the balloon is in both an inflated state and a deflated state. These claims further recite that the circumferential groove imparts a smaller diameter to the balloon than does the intermediate body when the balloon is in the inflated state. FIGs. 1 and 8 of the present application illustrate such a balloon 10 in an inflated state with circumferential grooves 15, 20 disposed between an intermediate stent-supporting body 12 and laterally-disposed cones 25, 30 that move radially, by virtue of balloon expansion or deflation. As seen in FIGs. 1 and 8, and as recited in the independent claims, the circumferential grooves 15, 20 are present when the balloon is in an inflated state, and the grooves 15, 20 impart a smaller diameter to the balloon than does the intermediate body 12.

Miller fails to disclose a circumferential groove in the manner that is recited in the independent claims. As seen in FIG. 5 of Miller, a balloon 12 includes a stent-supporting intermediate body. The presence of the stent 22 on the balloon 12 produces a bend on each end of the stent 22. While it is not agreed that the bend constitutes a groove as originally claimed, it is clear that when the balloon 12 is in an inflated state (see FIGs. 6 and 7), there is no bend, groove, or other indented region between the intermediate body and a cone (region at which reference numeral 12 is pointing) that has a smaller diameter than that of the intermediate body.

In the Office Action, the Examiner cites column 5, line 41 to column 6, line 18. This passage makes reference to the method outlined in FIGs. 8 to 12. As depicted in FIG. 12, when

the balloon is heated with the stent crimped around the circumference, a shoulder is formed on each side of the stent. The intermediate body, beneath the stent, does not impart a smaller diameter to the balloon than any grooves that accommodate the stent.

The Examiner also cites FIG. 15 of Miller, which is a cross-sectional view of a portion of a stent 26 being partially embedded into an outer layer of a balloon 30. Although the stent 26 makes a groove in the balloon 30, the groove is a longitudinal groove (as better seen in FIG. 16), and is not between the intermediate body and one of the proximal and distal cones as recited in independent claims 1, 6, 10, and 15. Because Miller fails to teach or suggest a circumferential groove having the dimensional relationships recited in independent claims 1, 6, 10, and 15, it is submitted that the claims are novel. Consequently, it is respectfully requested that the rejections under 35 U.S.C. § 102(e) be withdrawn.

35 U.S.C. §103 Rejections

Claims 4, 5, 12, 13 and 18 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Miller in view of Solar (US Patent 6,254,608). These rejections are respectfully traversed.

Claims 4, 5, 12, 13, and 18 recite that a circumferential groove is filled with a flexible material, such as a flexible foam. Solar is cited against the claims for disclosing the use of a conforming material such as a foam to secure a stent against a balloon. However, nowhere in Solar is there any disclosure of a circumferential groove that is filled with a flexible or conforming material. The mere reference to the use of a foam as a stent securing feature, without more, would not teach or suggest to a person of ordinary skill in the art that it would be desirable to provide a circumferential groove that is filled with such a foam. Further, Solar fails to compensate for the previously-discussed deficiencies of Miller. For at least these reasons, it is submitted that claims 4, 5, 12, 13, and 18 are patentable in their own right, and it is respectfully requested that the rejections under 35 U.S.C. § 103(a) be withdrawn.

Conclusion

For the foregoing reasons, Applicant believes all the pending claims are in condition for allowance and should be passed to issue. The Commissioner is hereby authorized to charge any additional fees which may be required under 37 C.F.R. 1.17, or credit any overpayment, to Deposit Account No. 01-2525. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at telephone (707) 543-0221.

Respectfully submitted,

/Catherine C. Maresh, Reg. No. 35,268/  
Catherine C. Maresh  
Registration No. 35,268  
Attorney for Applicant

Medtronic Vascular, Inc.  
3576 Unocal Place  
Santa Rosa, CA 95403  
Facsimile No.: (707) 543-5420